

REMARKS

Upon entry of the present Amendment, claims 1-15 and 17-23 will be pending in the Application.

Claims 6 and 11 have been amended for clarification. Claim 5 has been canceled without prejudice. New claim 29 has been added in an effort to better define the claimed invention. Support for new claim 29 may be found throughout the Specification, not least in the working example and in original claim 14.

No new matter has been introduced by the foregoing amendments.

Amendments to and cancellation of the claims, as set forth above, are made in order to streamline prosecution in this case by limiting examination and argument to certain claimed embodiments that presently are considered to be of immediate commercial significance. Amendment or cancellation of the claims is not in any manner intended to, and should not be construed to, waive Applicants' right in the future to seek such unamended or cancelled subject matter, or similar matter (whether in equivalent, broader, or narrower form) in the present application, and any continuation, divisional, continuation-in-part, RCE, or any other application claiming priority to or through the present application, nor in any manner to indicate an intention, expressed or implied, to surrender any equivalent to the claims as pending after such amendments or cancellations

Reconsideration is respectfully requested in view of the foregoing amendments and/or following remarks.

1. **Rejection of claims 1-15, 17-23, and 27-28 under 35 U.S.C. §103(a) as allegedly unpatentable over DE10042152 as translated by U.S. Patent No. 7,019,042 to Röckrath et al., hereafter "Rockrath", in view of U.S. Patent No. 5,064,871 to Sciangola, hereafter "Sciangola".**

Applicants and the Undersigned greatly appreciate the detailed basis of rejection from the PTO. However, Applicants must respectfully continue to disagree with regard to the currently pending claims as well as new claim 29.

The PTO's basis of rejection appears to be that it would have been obvious to use the catalyst of Sciangola in Rockrath's reaction to make a thixotropic agent comprising urea crystals.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.

The instant combination of references fails to satisfy this standard for several reasons.

I. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAIL TO PROVIDE A REASONABLE EXPECTATION OF SUCCESS AS TO THE INVENTIONS OF APPLICANTS' INDEPENDENT CLAIMS 1 AND 29.

Sciangola's teachings relate solely to the use of a particular catalyst combination to cure two component compositions used as adhesives, elastomers, and coatings. The entire focus of Sciangola is on the composition of the particular catalyst combination. That is, Sciangola teaches that the curing catalyst must include both a zirconium carboxylate as well as bismuth carboxylate. The effect of the addition of the zirconium catalyst, per Sciangola's working examples, is to extend the pot life of the two component compositions when mixed. Sciangola's examples show that compositions using only bismuth carboxylate as a curing catalyst have a shorter pot life as compared to compositions cured via the action of the bismuth carboxylate + zirconium carboxylate curing catalyst combination.

Thus, Sciangola only discloses the use of a combination catalyst which promotes a crosslinking reaction and which results in a cured, crosslinked reaction product that contains a urethane group and which is used as an adhesive, an elastomer, or a coating. Most importantly, the primary principle of operation in Sciangola is that the use of the

bismuth carboxylate alone acts 'too fast', i.e., has a disadvantageously short pot life and that the addition of the zirconium carboxylate is necessary to obtain an advantageous pot life.

The PTO relies upon the fact that both Sciangola's crosslinking reaction and Applicants' urea derivative reaction may generally be characterized as a reaction between an isocyanate and an isocyanate-reactive compound and that a catalyst useful in one reaction would have an identical or similar action in the other reaction.

However, this reasoning is flawed on several groups.

A prima facie case of obviousness requires more than a general similarity. A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). The foundational facts for the prima facie case of obviousness are: (1) the scope and content of the prior art; (2) the difference between the prior art and the claimed invention; and (3) the level of ordinary skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

In this case, the scope and content of the prior art are limited to curing catalysts that promote a crosslinked reaction product containing a urethane group useful as an adhesive, an elastomer, or a coating. Sciangola teaches nothing about a reaction catalyst that can be used to make urea crystals having improved solubility in a rheological agent such that a greater concentration of said urea crystals can be present in the rheological agent as compared to the prior art.

Those of skill in the relevant art understand that catalysts in particular are highly unpredictable and cannot be simply interchanged. Indeed, common sense indicates that catalyst behavior cannot be interchanged as may be done with solvents or simple binders. Such an analysis is in accordance with recent Federal Circuit holdings. "Our suggestion test is in actuality quite flexible and not only permits, but *requires*, consideration of common knowledge and common sense." *See, e.g., DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006).

Isocyanate/isocyanate reactive group reactions are widely variable and produce a great variety of reaction products. The common sense of one of skill in the art appreciates that a catalyst suitable for one reaction is not always interchangeable in all other reactions, even though such reactions may have reactants such as an isocyanate and an isocyanate reactive compound in common.

Second, Sciangola's overall principle of operation is that bismuth catalysts alone are unsuitable when it comes to pot life. One of skill in the art seeking to provide an uncrosslinked rheological agent that must go into a curable composition would necessarily be motivated against using a bismuth catalyst given that it appears from Sciangola to promote too rapid of a cure. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 123 U.S.P.Q. 349 (CCPA 1959); MPEP 2143.01.

Thus, the claimed combination of references fails to provide a reasonable expectation of success. In particular, one of skill in the art would not expect that you could select and successfully use only one of the two curing catalysts in Sciangola to make urea crystals that would have greater solubility and sufficient stability in a rheological agent to allow for use in uncrosslinked and curable coating compositions.

II. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAIL TO PROVIDE ANY MOTIVATION TO DO WHAT APPLICANTS HAVE DONE IN THE INVENTIONS OF APPLICANTS' INDEPENDENT CLAIMS 1 AND 29.

The entire focus of Applicants' claimed inventions are to obtain rheological agents that have an increased concentration of urea crystals therein.

Nothing in either reference suggests this problem or a solution thereto. A statement that modifications of the prior art to meet the claimed inventions would have "*well within the ordinary skill of the art* at the time the claimed invention was made"

because the references teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); MPEP 2143.01.

Indeed, given Sciangola's teachings regarding the effect of bismuth catalysts alone on urethane crosslinking reactions, it is submitted that one of skill in the art would be motivated not to use bismuth to make a reaction product that would be subsequently incorporated into a curable crosslinkable composition. For example, the Federal Circuit has clearly stated that "each prior art reference must be evaluated as an entirety, and ...all of the prior art must be evaluated as a whole". *In re Fritch*, 23 U.S.P.Q.2d 1780, 1782 (Fed. Cir. 1992). And particularly on point, the CCPA had earlier said "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 108 U.S.P.Q. 871, 881 (C.C.P.A. 1981).

III. THE COMBINATION OF ROCKRATH AND SCIANGOLA FAIL TO TEACH OR SUGGEST ALL OF THE REQUIRED LIMITATIONS OF APPLICANTS' INDEPENDENT CLAIMS 1 AND 29.

The combination of references fails to disclose Applicants' requirement that the rheological agent contain more than 10% by weight of the reaction product of (a1) and (a2).

The mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an applicant to prove conclusively that the Patent Office is wrong. *In re Soli*, 137 U.S.P.Q. 797 (C.C.P.A. 1963).

In this case, the PTO appears to be arguing that more than 10% is 'almost' 10% and thus is a limitation that may be ignored. The PTO relies upon *Titanium Metals*. However, this case is distinguishable from the instant fact pattern because the instant

invention relates to unpredictable catalysts and the issue of solubility of urea crystals. In this case, 10% vs more than 10% is a significant result that have an discernable effect as illustrated in a comparison of the working examples of Rockrath and Applicants.

Rockrath's Example 1 makes a rheological agent having 3.5% by weigh urea crystals while Applicants working example results in an agent having 14.32% by weight of urea crystals. Rockrath's Example 2 must use 20 parts by weight of her agent from Example 1 in a coating composition. In contrast, Applicants' working example shows that only 4.6 parts of the instantly claimed rheological agent need be used in a coating composition.

Thus, it is submitted that Applicants' required limitation of 'more than 10%' by weight may not be ignored by the PTO.

IV. APPLICANTS' WORKING EXAMPLE AMPLY ILLUSTRATES THE UNEXPECTED RESULTS OBTAINED FROM THE INVENTIONS OF APPLICATIONS CLAIMS 1 AND 29.

As indicated above, the cited combination of references fails to provide a prima facie case of obviousness.

However, in any event, Applicants' working example shows the unexpected improvements obtained with the instant inventions.

Rockrath's Example 1 makes a rheological agent having 3.5% by weigh urea crystals while Applicants working example results in an agent having 14.32% by weight of urea crystals. Rockrath's Example 2 must use 20 parts by weight of her agent from Example 1 in a coating composition. In contrast, Applicants' working example shows that only 4.6 parts of the instantly claimed rheological agent need be used in a coating composition.

Accordingly, in view of all of the foregoing, reconsideration and removal of the rejection is respectfully requested.

2. **Rejection of claims 1-15, 17-23, and 27 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of Rockrath, in view of Sciangola.**

Applicants respectfully traverse the nonstatutory obviousness-type double patenting rejection in view of the above arguments, which are hereby incorporated by reference. Withdrawal of this rejection is respectfully requested.

CONCLUSION

Applicants respectfully submit that the Application and pending claims are patentable in view of the foregoing remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,

/MaryEGolota/
Mary E. Golota
Registration No. 36,814
Cantor Colburn LLP
(248) 524-2300

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CORRESPONDENCE ADDRESS ONLY

BASF CORPORATION
1609 Biddle Avenue
Wyandotte, MI 48192
Customer No. 77224

MEG